| Issue | Classification |   |
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| Application No. | Applicant(s)    |  |
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| 10/646,758      | ISHIZAKI ET AL. |  |
| Examiner        | Art Unit        |  |
|                 |                 |  |
| Yong D Pak      | 1652            |  |

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|  |      |      | OR   | IGINAL           |       |       |                        | CRO          | SS REFEREN               | CE(S)        |  |          |  |  |  |  |
|  | CLA  | SS   |      | SUBCLASS         | CLASS |       |                        |              |                          |              |  |          |  |  |  |  |
|  | 43   | 5    |      | 198              | 435   | 4     | 6                      | 252.3        | 320.1                    | 69.1         | 71.1   | 440      |  |  |  |  |
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| С  | 0    | 7    | H    | 21/04            |       |       |                        |              |                          |              |  | <u> </u> |  |  |  |  |
| Yong Pak 2-1-2005<br>(Assistant Examiner) (Date) |      |      |      |                  |       | Mn    | anju                   | ath Rao      | Total Claims Allowed: 20 |              |  |          |  |  |  |  |
| (Legal Instruments Examiner) (Date)              |      |      |      |                  |       |       | Manjun<br>ary Examine: |              | O.G. O.G. Print Claim(s) |              |  |          |  |  |  |  |

| T.D.   R.147   R.147   R.147   R.147   R.147   R.147   R.141   R.141 |          | Claims renumbered in the same order as presented by applicant |          |          |            |          |                 |     |     |     | PΔ  |          | Пт          | n .        |          |                | 4.47       |     |            |     |
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| 3         16         33         63         93         123         153         183           4         17         34         64         94         124         154         184           5         18         35         65         95         125         155         185           6         19         36         66         96         126         156         186           7         38         68         98         128         158         188           9         39         69         99         129         159         188           10         40         70         100         130         160         190           11         41         71         101         131         161         191           12         42         72         102         132         162         192           13         43         73         103         133         163         193           14         44         74         104         134         164         194           15         45         75         105         135         165         195 <td< td=""><td>-</td><td></td><td>i</td><td></td><td></td><td>i 1</td><td></td><td></td><td></td><td></td><td>92</td><td></td><td></td><td></td><td>1  </td><td></td><td></td><td>1</td><td></td><td></td></td<>   | -        |   | i        |          |            | i 1      |                 |     |     |     | 92  |          |             |            | 1        |                |            | 1   |            |     |
| 4         17         34         64         94         124         154         184           5         19         36         66         99         125         155         185           7         20         37         67         97         127         157         187           8         38         68         98         128         158         188           9         39         69         99         129         159         188           10         40         70         100         130         160         190           11         41         71         101         131         161         191           12         42         72         102         132         162         192           13         43         73         103         133         163         193           14         44         74         104         134         164         194           15         45         75         105         135         165         195           16         46         76         106         136         166         196           17         <  | <b></b>  |   |          |          |            |          |                 |     | ]   |     | 93  |          |             |            | 1 1      |                |            | 1   |            |     |
| 5         18         35         65         96         125         155         185           7         20         37         67         97         127         157         186           8         38         68         98         128         158         188           9         39         69         99         129         159         188           10         40         70         100         130         160         190           11         41         71         101         131         161         191           12         42         72         102         132         162         192           13         43         73         103         133         163         193           14         44         74         104         134         164         194           15         45         75         105         135         165         195           16         46         76         106         136         166         196           17         47         77         107         137         167         197           18         48  | -        |   |          |          |            |          |                 |     |     |     | 94  |          |             |            | 1 1      |                |            | 1   |            |     |
| 6         19         36         66         96         126         156         186           7         8         38         68         98         127         157         187           8         39         69         128         158         188         188           9         10         40         70         100         130         160         190           11         41         71         101         131         161         191         191           12         42         72         102         132         162         192         192           13         43         73         103         133         163         193         193           14         44         74         104         134         164         194         194           15         45         75         105         135         165         195         195         193         193         193         193         193         193         166         196         196         196         196         196         197         197         137         167         197         197         137         167         <   | <b>—</b> |   |          |          |            |          |                 |     | ]   |     | 95  |          |             |            | 1 1      |                |            | 1   | <b>—</b> — |     |
| 7         20         37         67         97         127         157         187           8         9         38         68         99         128         158         188           9         10         40         70         100         130         160         189           11         41         71         101         131         161         191         191           12         42         72         102         132         162         192         192           13         43         73         103         133         163         193         193           14         44         74         104         134         164         194 <td><u> </u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>}</td> <td></td> <td>96</td> <td></td> <td></td> <td></td> <td>1 1</td> <td></td> <td></td> <td>1</td> <td></td> <td></td>   | <u> </u> |   |          |          |            |          |                 |     | }   |     | 96  |          |             |            | 1 1      |                |            | 1   |            |     |
| 8         38         68         98         128         158         188           9         10         40         70         100         130         160         190           11         41         71         101         131         161         191           12         42         72         102         132         162         192           13         43         73         103         133         163         193           14         44         74         104         134         164         194           15         45         75         105         135         165         195           16         46         76         106         136         166         196           17         47         77         107         137         167         197           18         48         78         108         138         168         198           2 19         49         79         109         139         169         198           3 20         50         80         110         140         170         200           4 21         51         81 </td <td></td> <td></td> <td></td> <td>20</td> <td></td> <td></td> <td></td> <td>67</td> <td></td> <td></td> <td>97</td> <td></td> <td></td> <td></td> <td>Ì</td> <td></td> <td></td> <td></td> <td></td> <td></td>   |          |   |          | 20       |            |          |                 | 67  |     |     | 97  |          |             |            | Ì        |                |            |     |            |     |
| 10   |          |   |          |          |            |          |                 | 68  |     |     | 98  |          |             |            |          |                |            | l   |            |     |
| 10   |          |   |          |          |            |          |                 | 69  |     |     | 99  |          |             |            | i t      |                |            | l   |            |     |
| 11   |          |   |          |          |            |          |                 |     |     |     |     |          |             |            | i i      |                |            |     |            |     |
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| 13   | <u></u>  |   |          |          |            |          |                 | 72  |     |     |     | 1        |             |            | h        |                |            |     |            |     |
| 14     44     74     104     134     164     194       15     45     75     105     135     165     195       16     46     76     106     136     166     195       17     47     77     107     137     167     197       2     19     48     78     108     138     168     198       2     19     49     79     109     139     169     199       3     20     50     80     110     140     170     200       4     21     51     81     111     141     171     201       5     22     82     112     142     172     202       6     23     53     83     113     143     173     203       7     24     84     114     144     174     204       8     25     85     115     145     175     205       9     26     56     86     118     148     178     208       10     27     57     67     117     147     177     207       11     28     59     89     119     149  |          |   |          |          |            | [        |                 | 73  |     |     |     | j        |             |            | ·        |                |            |     |            |     |
| 15     45     75     105     135     165     195       17     47     77     107     137     167     196       2 19     49     78     108     138     168     198       3 20     50     80     110     140     170     200       4 21     51     81     111     141     171     201       5 22     52     82     112     142     172     202       6 23     53     83     113     143     173     203       7 24     54     84     114     144     174     204       8 25     55     85     115     145     175     205       9 26     56     86     116     147     177     207       11 28     58     88     118     148     178     208       12 29     59     89     119     149     179     209  |          |   |          |          |            |          |                 | 74  |     |     |     | Ì        |             |            | <b> </b> |                |            | i   |            |     |
| 16     46     76     106     136     166     196       17     47     77     107     137     167     197       2 19     48     78     108     138     168     198       3 20     50     80     110     140     170     200       4 21     51     81     111     141     171     201       5 22     52     82     112     142     172     202       6 23     53     83     113     143     173     203       7 24     54     84     114     144     174     204       8 25     55     85     115     145     175     205       9 26     56     86     118     148     176     206       10 27     57     87     117     147     177     207       11 28     58     88     118     148     178     208       12 29     59     89     119     149     179     209       13 30     60     90     109     149     179     209  |          |   |          |          |            | [        |                 | 75  |     |     |     | Ì        |             |            |          |                |            | }   |            |     |
| 17     47     77     107     137     167     196       2     19     48     78     108     138     168     198       3     20     50     80     110     140     170     200       4     21     51     81     111     141     171     201       5     22     52     82     112     142     172     202       6     23     53     83     113     143     173     203       7     24     54     84     114     144     174     204       8     25     55     85     115     145     175     205       9     26     56     86     118     148     176     206       10     27     57     87     117     147     177     207       11     28     58     88     118     148     178     208       12     29     59     89     119     149     179     209       13     30     60     90     109     149     179     209   |          |   | 1        |          |            | [        |                 |     |     |     |     | Ì        | $\neg \neg$ |            | ŀ        |                |            | ł   | -+         |     |
| OD       18       48       78       108       138       168       198         2       19       49       79       109       139       169       199         3       20       50       80       110       140       170       200         4       21       51       81       111       141       171       201         5       22       52       82       112       142       172       202         6       23       53       83       113       173       203         7       24       54       84       114       144       174       204         8       25       55       85       115       145       175       205         9       26       56       86       118       148       176       206         10       27       57       87       117       147       177       207         11       28       58       88       118       148       178       208         12       29       59       89       119       149       179       209         13       30       60   |          |   |          |          | 47         |          |                 |     |     |     |     | 1        |             |            | <b>}</b> | -              |            | }   |            |     |
| 2     19     49     79     109     139     169     199       3     20     50     80     110     140     170     200       4     21     51     81     111     141     171     201       5     22     52     82     112     142     172     202       6     23     53     83     113     173     203       7     24     54     84     114     144     174     204       8     25     55     85     115     145     175     205       9     26     56     86     118     148     176     206       10     27     57     87     117     147     177     207       11     28     58     88     118     148     178     208       12     29     59     89     119     149     179     209       13     30     60     90     109     149     179     209  |          |   |          |          | 48         | Г        |                 |     |     |     |     | 1        | _           |            |          |                |            | 1   |            |     |
| 3         20         50         80         110         140         170         200           4         21         51         81         111         141         171         201           5         22         82         112         142         172         202           6         23         53         83         113         143         173         203           7         24         54         84         114         144         174         204           8         25         55         85         115         145         175         205           9         26         56         86         118         148         178         206           10         27         57         87         117         147         177         207           11         28         58         88         118         148         178         208           12         29         59         89         119         149         179         209           13         30         60         90         109         149         179         209  |          |   |          |          | 49         | Γ        |                 |     | Ì   |     |     | 1        | _           |            |          | -              |            | }   |            |     |
| 4     21     51     81     111     141     171     201       5     22     52     82     112     142     172     202       6     23     53     83     113     143     173     203       7     24     54     84     114     144     174     204       8     25     55     85     115     145     175     205       9     26     56     86     118     146     176     206       10     27     57     87     117     147     177     207       11     28     58     88     118     148     178     208       12     29     59     89     119     149     179     209       13     30     60     90     109     149     179     209  |          |   |          |          | 50         | ſ        |                 | 80  | j   |     |     | ŀ        |             |            | <u> </u> |                |            | ŀ   |            |     |
| 5     22       6     23       7     24       8     25       9     26       10     27       57     87       11     28       12     29       13     30       13     30       10     27       11     28       12     29       13     30       13     30       142     142       112     143       114     144       114     144       115     145       115     145       116     146       117     147       117     177       208       118     148       178     208       119     149       179     209   |          |   |          |          | 51         |          |                 | 81  | - 1 |     |     | Ì        | _           |            | - F      | $\dashv$       |            |     |            |     |
| 6         23         53         83         113         143         173         203           7         24         54         84         114         144         174         204           8         25         55         85         115         145         175         205           9         26         56         86         118         146         176         206           10         27         57         87         117         147         177         207           11         28         58         88         118         148         178         208           12         29         59         89         119         149         179         209           13         30         60         90         400         400         400         400  |          |   |          |          | 52         | ſ        |                 | 82  | Ì   |     |     | F        | $\neg$      |            | ŀ        | $\dashv$       |            | - } |            |     |
| 7     24     54     84     114     144     174     204       8     25     55     85     115     145     175     205       9     26     56     86     118     146     176     206       10     27     57     87     117     147     177     207       11     28     58     88     118     148     178     208       12     29     59     89     119     149     179     209       13     30     60     90     109     149     179     209   |          |   |          |          | 53         | Г        |                 | 83  | ı   |     |     | f        | -+          | _          | <b>}</b> | <del></del>    |            | - 1 |            |     |
| 8     25     55     85     115     145     174     204       9     26     56     86     118     146     176     205       10     27     57     87     117     147     177     207       11     28     58     88     118     148     178     208       12     29     59     89     119     149     179     209       13     30     60     90     109     149     179     209  | 7        | 24  | ſ        |          | 54         | Г        |                 |     | ľ   |     |     | ŀ        | -+          |            | <b>⊢</b> |                |            | - 1 |            |     |
| 9     26     56     86     116     146     176     205       10     27     57     87     117     147     177     207       11     28     58     88     118     148     178     208       12     29     59     89     119     149     179     209       13     30     60     90     109     109     109   |          |   | ſ        |          |            | 1        |                 |     | 1   |     |     | -        |             |            | <b>-</b> |                |            | -   |            |     |
| 10     27       11     28       12     29       13     30       60     89       119     149       12     176       12     29       13     30   |          | 26  |          |          |            | <u> </u> | $\neg \uparrow$ |     | 1   |     |     | -        |             |            | -        |                |            | -   |            |     |
| 11     28     58     68     118     148     178     208       12     29     59     89     119     149     179     209       13     30     60     90     100     100     100     100  |          | 27  | ſ        |          |            | r        |                 |     | ŀ   |     |     | ⊢        |             |            | <b>-</b> |                |            |     |            |     |
| 12     29       13     30       60     89       119     148       148     178       208       119     149       179     209  | 11       |   | <u> </u> |          |            | r        |                 |     | ŀ   |     |     | -        |             | _          | ⊢        |                |            | -   |            |     |
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